[SMART INTERNETWORKING OPERATING SYSTEM FOR LOW COMPUTATIONAL POWER MICROPROCESSORS]

Abstract of Disclosure

Low processing power microprocessors are cheap and represent a great solution for automation, control, basic signal processing and other problems. A microprocessor"s intelligence derives from the program it executes. The Smart Internetworking Operating System (SIOS) is a multitasking operating system capable of operating in low processing power platforms, such as 8-bit microprocessors. SIOS supports rapid development of complete applications since task programming is based on SIOS instructions, instead of on the underlying microprocessor"s native language. The SIOS instruction set allows the execution of both simple and complex operations, which speeds up application development since programmers need not be concerned with the microprocessor-specific details, and can concentrate on developing intelligent operation routines according to the requirements of the problem at hand. SIOS provides support for the management of processor resources, memory, input and output ports, and internal peripherals, such as timers, ADCs and others.

Figures